

Supporting innovation –
Designing the future



German Broadband Expansion supported by GeoNode

GeoNode Summit 2020

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atene KOM GmbH | Agency for Communication, Organization and Management

| GeoNode for Broadband Expansion

Agenda

- Introduction
- GeoNode as a customer project
 - Deployment
 - Automated geodata Import
 - Modifications
- Challenges
- Outlook

| Introduction

Consulting and Project Development

atene KOM GmbH is an European consulting and project development company with around 350 employees and headquarter in Berlin.

Our clients are public institutions and municipal companies. Successful cooperation with international, cross-industry networks of over 1.500 clients and partners

We look back at over 10 years of experience in funding and municipal consulting.

www.atenekom.eu

Headquarter

Berlin

Local Offices

Schwerin

Osterholz-Scharmbeck

Leipzig

Bonn

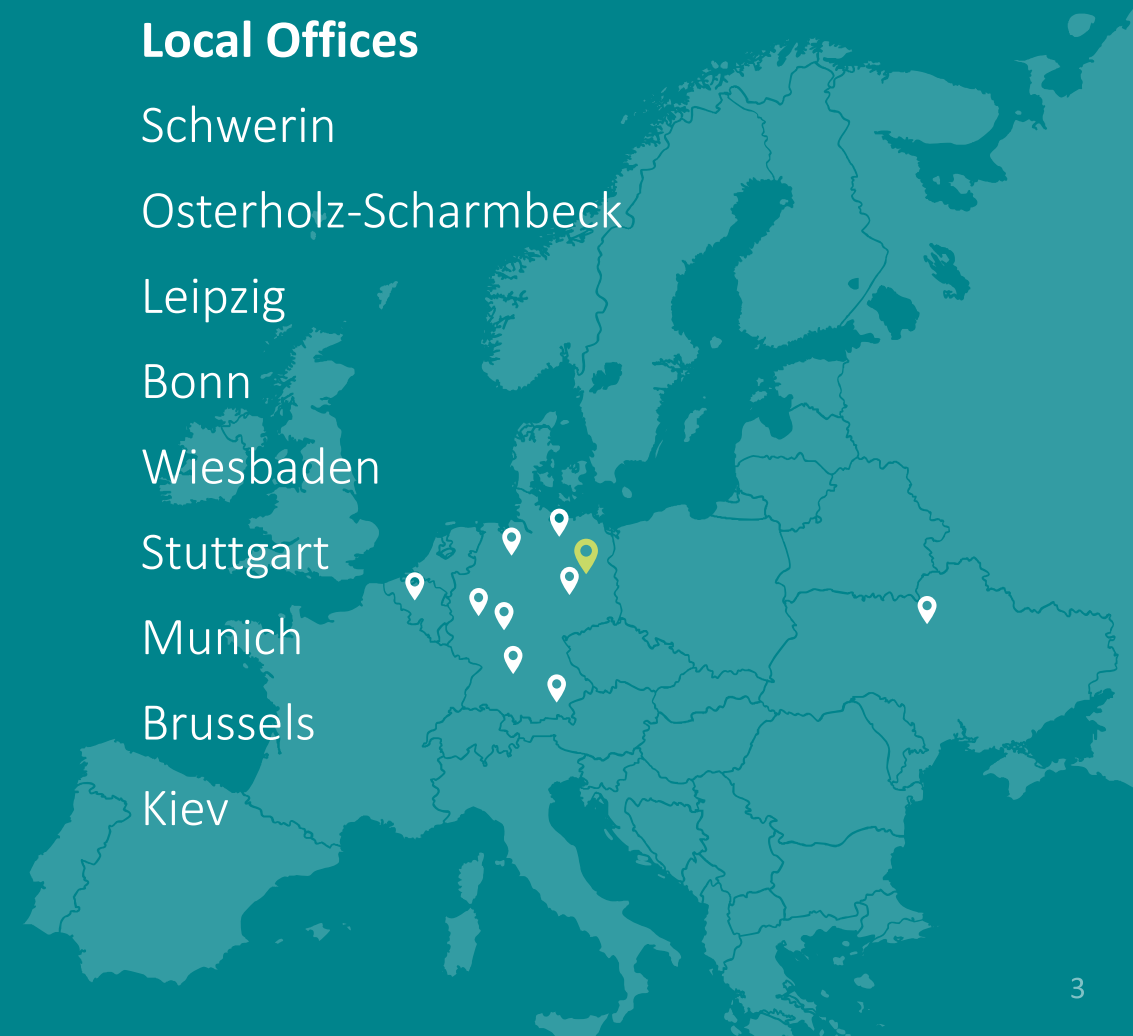
Wiesbaden

Stuttgart

Munich

Brussels

Kiev



Project manager for the Federal Funding Program



Bundesförderung Breitband



Since May 2016 atene KOM has been involved in the expansion of the gigabit internet on behalf of the Federal Ministry of Transport and Digital Infrastructure (BMVI).

A nationwide supply of 50 Mbit per second is the declared goal of the federal government. To this end, the federal government is making more than 4 billion Euros available as part of the Federal Broadband Funding Program.

| GeoNode as a customer project

GeoNode as GIS

Public GeoNode stacks hosted by atene KOM

GeoNode 2.10.1

Docker Deployment

GeoNode Project Deployment

- <https://breitband-in-sh.de>
- <https://zensus-in-sh.de/>
- <https://bimv.atenekom.eu>
- <https://tim-thueringen.de>
- <https://gigamap-hessen.de>
- <https://bis.kommpaktnet.de/>

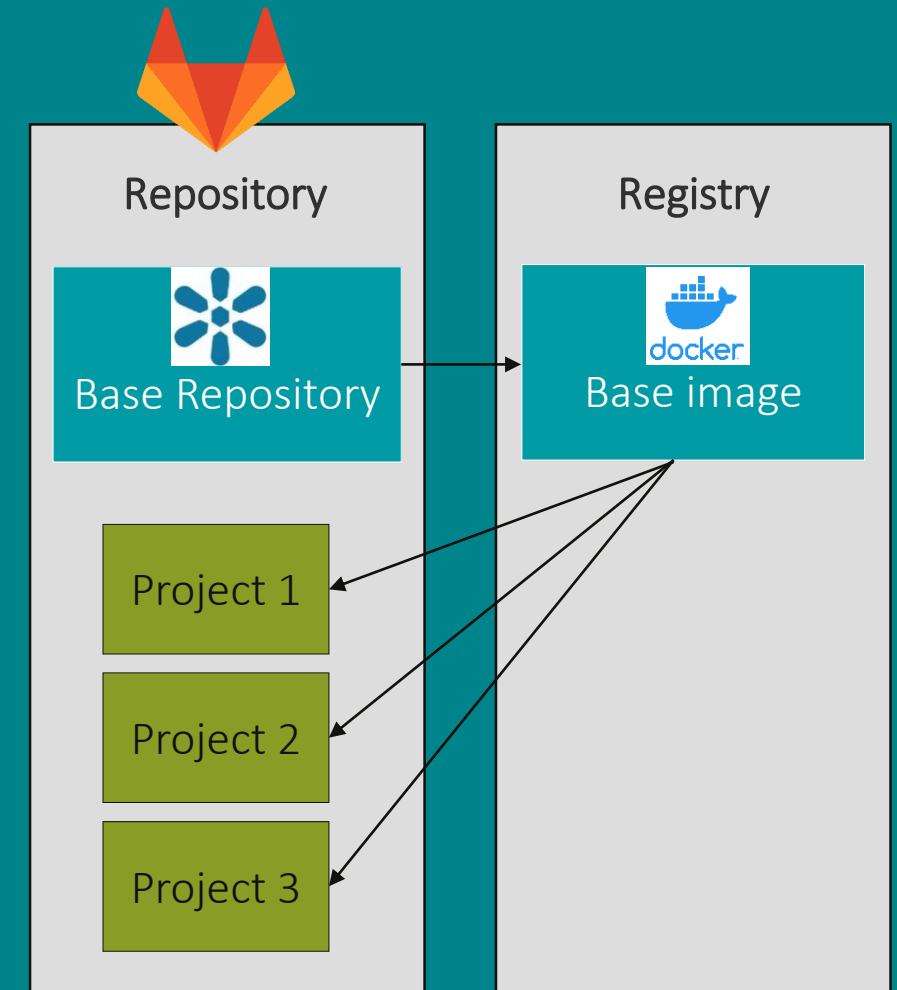
Each of these Geographic Information Systems serves as a central information source mostly for the broadband availability, expansion plans and further more.

It also contains maps for public view.

GeoNode as a customer project

Docker Deployment

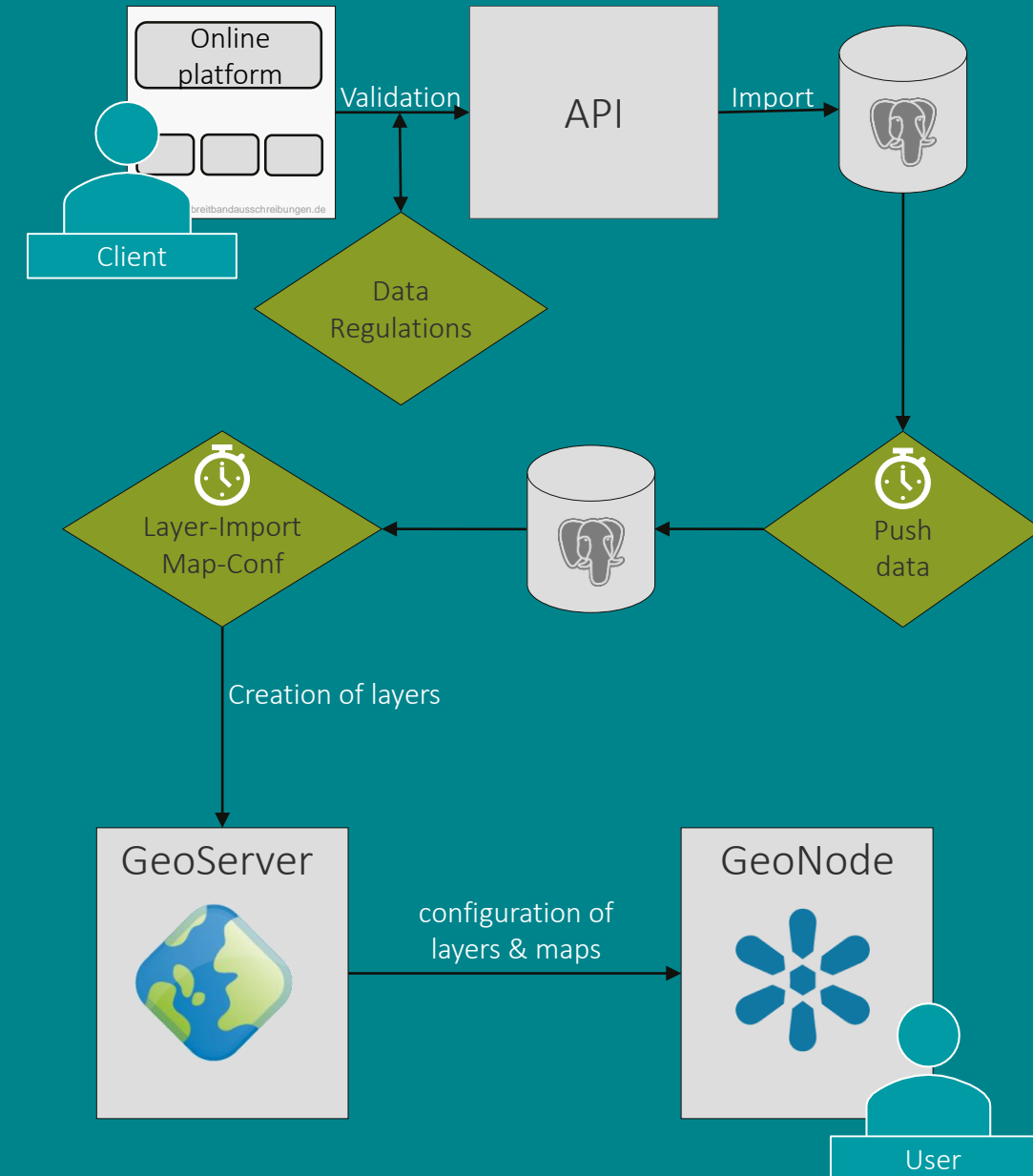
- GeoNode Project Implementation
- 1 base project with common features
- All customer GeoNode Stacks are built on top with project specific style and configuration
- Pro
 - Seperated repositories
- Con
 - Long deployment process



GeoNode as a customer project

Automated geodata Import

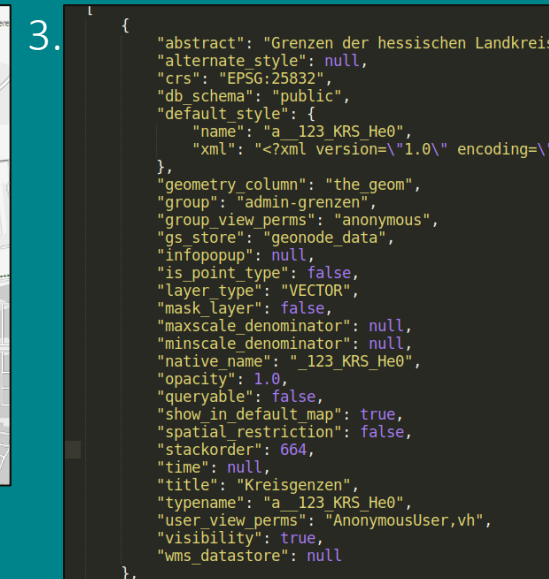
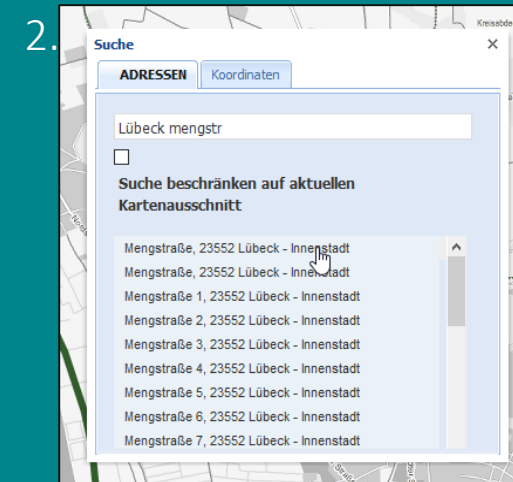
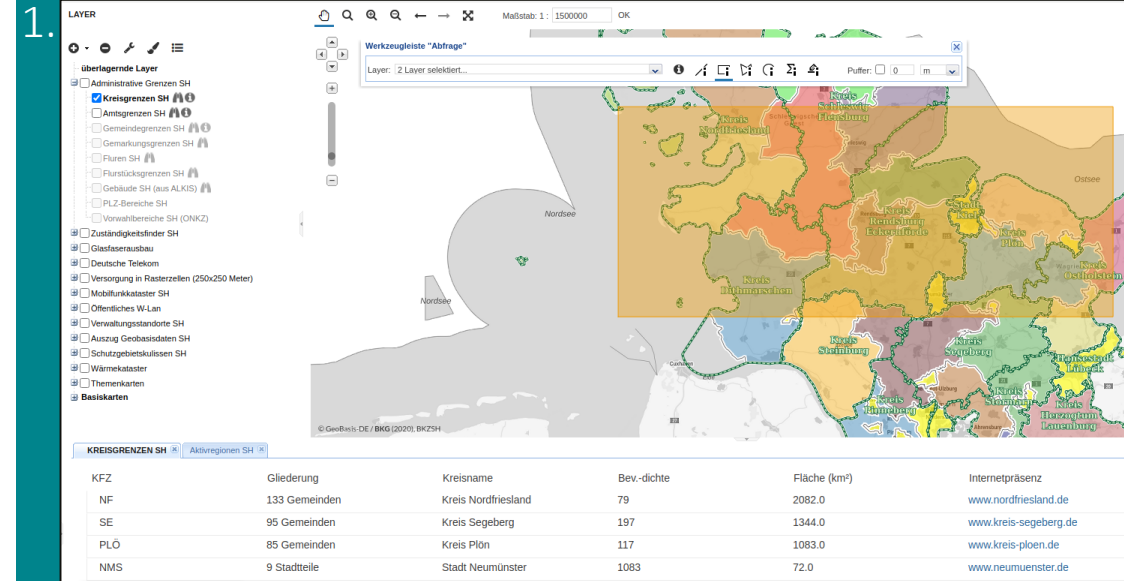
- Automated import and configuration of geodata
- Processes regularly incoming datasets
- Standardized datasets (data regulations)
- Queue-Based approach
- Over time > 32 000 data sets imported in >2300 maps



GeoNode as a customer project

GeoNode / GIS – Modifications (1)

1. Query of multiple Layers
2. Address / coordinate search
3. Export- / Import commands
 - Transfer specific layer between two instances
 - Styles, properties, permissions
 - DB-Dump

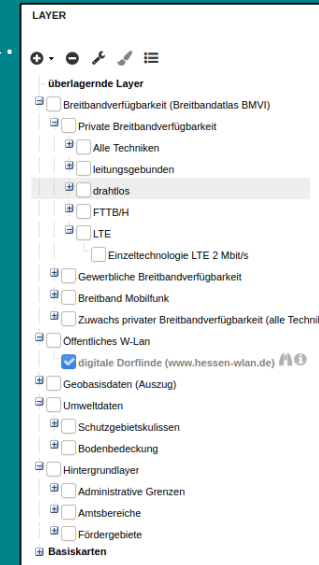


GeoNode as a customer project

GeoNode / GIS – Modifications (2)

1. Layer tree with subgroups
2. Geographical Restriction: GeoAuth
 - Proxy between GeoNode & GeoServer
 - Hides unauthorized areas in the map
3. Measure-Functionality
 - Allows counting and measuring in the map
 - E.g. Length of Street, Number of Houses

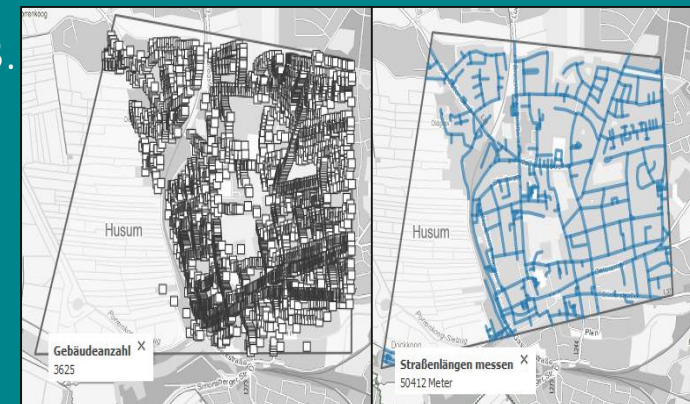
1.



2.



3.



| GeoNode for Broadband Expansion

GeoNode – Challenges

- Performance
 - WFS / Query not working while layer import
 - Import (esp. setting of permissions)
- MapStore customization
 - New technology for us
 - Documentation

GeoNode for Broadband Expansion

GeoNode / GIS – Outlook

- Update to GeoNode 3.1
 - Update own Django-Features to Python3
- GeoServer clustering (load balancer)
- Single-Sign-On
- Optimization of Deployment
- MapStore Customization
 - Integration of existing MapStore Features
 - Visual appearance
 - Optimization for greater number of layers
 - Internet Explorer 11 Compatibility

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